

USSN 09/067,733
Schwarze et al

11. In the process for generating shock waves for medical uses by application of a high electrical voltage to two electrodes mounted in a liquid medium, wherein the improvement comprises adding to said liquid medium at least in the area surrounding the electrodes an effective amount of a catalyst to suppress electrolytic formation of gases due to application of said high voltage to said electrodes.

12. In the process for generating shock waves for medical uses by application of a high electrical voltage to two electrodes mounted in a liquid medium, wherein the improvement comprises adding to said liquid medium at least in the area surrounding the electrodes an effective amount of a catalyst to promote formation of said liquid medium by recombination of gases formed by application of said high voltage to said electrodes.

13. A process for suppressing formation and/or promoting recombination of gases formed during generation of shock waves by application of a high electrical voltage to two electrodes mounted in a liquid medium, which process comprises adding to said liquid medium an effective amount of a catalyst to suppress formation and/or promote recombination of said gases.

USSN 09/067,733

Schwarze et al

14. A device for generating shock waves for medical uses by means of a high voltage electrical spark discharge comprising:

- (a) a pair of electrodes; and
- (b) a liquid medium containing an effective amount of a catalyst to suppress formation and/or promote recombination of gases formed as a result of said high voltage electrical spark discharge.

15. The device of claim 14 wherein said liquid medium is water and the catalyst is a hydrogenation catalyst.

16. The device of claim 15 wherein said hydrogenation catalyst is selected from the group consisting of platinum and palladium.

17. The device of claim 16 wherein said platinum catalyst is selected from the group consisting of platinum on active carbon, platinum powder, platinum sponge and platinum black.

18. The device of claim 16, wherein said palladium catalyst is selected from the group consisting of palladium on active carbon, palladium powder, palladium

USSN 09/067,733
Schwarze et al

sponge and palladium black.

19. The device according to claims 14, 15, 16, 17, or 18 wherein the catalyst concentration is at least 0.1 mg/ml.

20. The device according to claim 19, wherein the catalyst concentration is 0.2-4 mg/ml.

21. A device for generating shock waves for medical uses by means of a high voltage electrical spark discharge comprising:

(a) a pair of electrodes;

(b) a liquid medium; and

(c) a catalyst dispersed in said liquid medium in an effective amount to suppress formation and/or promote recombination of gases formed as a result of said high voltage electrical spark discharge.

22. A device for producing shockwaves by means of an electrical spark gap discharge comprising: a housing containing a liquid medium; a pair of closely-spaced discharge electrodes, an enclosure disposed about said electrodes in said